# EUROCONTROL NETWORK MANAGER RELEASE NOTES

Planned for implementation 2020-2021

Edition: 3.1
Edition Validity Date: 04/11/2020

SUPPORTING EUROPEAN AVIATION

# IMPORTANT NOTIFICATIONS

- **Minor NM24.0.1 release:**
    - **Deployment will take place on 10/11/2020 22h00-23h30 UTC (5.3)**
    - **No CHMI change: no new CHMI to download (5.3)**
    - **NM recommends to use the new URL (link) to NES (n-CONECT) (5.4.1)**

# DOCUMENT CHARACTERISTICS

| Document Title | Document Subtitle (optional) | Edition Number | Edition Validity Date |
|---|---|---|---|
| EUROCONTROL NETWORK MANAGER RELEASE NOTES | Planned for implementation 2020-2021 | 3.1 | 04/11/2020 |

| Abstract |
|---|
| This document describes the new or modified functions (affecting external users) delivered by the Network Manager as part of the Network Manager software releases.<br>This document is available at:<br>https://www.eurocontrol.int/publication/network-manager-release-notes-planned-implementation-2020-2021 |

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**STATUS AND ACCESSIBILITY**

| Status | | Accessible via | |
|---|---|---|---|
| Working Draft | ☐ | Intranet | ☐ |
| Draft | ☐ | Extranet | ☐ |
| Proposed Issue | ☐ | Internet (www.eurocontrol.int) | ☒ |
| Released Issue | ☒ | | |

**TLP STATUS**

| Intended for | | Detail |
|---|---|---|
| Red | ☐ | Highly sensitive, non-disclosable information |
| Amber | ☐ | Sensitive information with limited disclosure |
| Green | ☐ | Normal business information |
| White | ☒ | Public information |

# Edition History

The following table records the complete history of the successive editions of the present document.

| Edition No. | Edition Validity Date | Reason |
|---|---|---|
| 1.0 | 03/12/2019 | First edition - NM24.0 content and initial deployment plan. |
| 2.0 | 07/09/2020 | No NM24.5 release will take place – p.44 |
| 3.0 | 01/10/2020 | NM24.0.1 content and deployment plan – p.40 |
| 3.1 | 04/11/2020 | **NM24.0.1 deployment schedule – p.42**<br>**No CHMI change: no new CHMI to download – p.42**<br>**New URL (link) to NES (n-CONECT) – p.43** |

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# 1 INTRODUCTION

This document describes the new or modified functions delivered by the Network Manager as part of the Network Manager software releases which affect external users.

The purpose of this document is to give users of Network Manager Services advance notice of modifications to enable them to anticipate any impact on their operational procedures and/or systems.

The Network Manager Releases include many changes arising from different sources and coordinated via various fora. They allow the implementation of new functionalities to cope with Network Manager Directorate business plans.

The Network Manager Release Notes are organised as a rolling document describing the functions currently under development for future releases. Other functions which are being considered for possible development but which are not yet ready to be presented are not included in this document.

If you wish to automatically receive the new versions of the Release Notes (and any communication related to the NM Releases) by email, please register at:

http://www.eurocontrol.int/network-operations/self-registration-form

(Choose "Subscribe to receive e-mail notifications when the NM Release Notes are updated" in the field “purpose of the request”).

The current document is available at:

https://www.eurocontrol.int/library?f%5B0%5D=activitys%3A774

(Select the “Release and deployment documents” as Product category)

Or at: https://www.eurocontrol.int/publication/network-manager-release-notes-planned-implementation-2020-2021

Any questions or comments related to the Network Manager Releases may be sent to:

nm.releases@eurocontrol.int

# 2 Releases content

Only FBs or CRs that have an impact on operations for external users are listed below.

## 2.1 NM24.0

| Programme | Functional Block | | NM24.0 |
|---|---|---|---|
| **Airport-Network Integration** | | **§3.1** | |
| FB1027 | AOP/NOP Integration - Phase IV | | **p.24** |
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| **CTM (Cooperative Traffic Management)** | | **§3.3** | |
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| FB1095 | RAD Full Completion | | **p.33** |
| NCO-14974 | Improve presentation of updates in both exported Excel files and RAD application | | **p.21** |
| **Operations Improvements** | | **§3.8** | |
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| I2_118832 | Retrieving original ADES for diverted flight via B2B | | **p.35** |
| I2_118817 | Problem when updating the EOBT with a second FPL | | **p.10** |
| CR_047923 | Change ACH sending parameter | | **p.10** |
| FB1059 | ATFCM Domain improvements | | **p.36** |
| FB1085 | eHelpDesk improvements | | **p.38** |
| CR_047018 | Delete old group rerouting indicators from a flight when applying a similar group rerouting | | **p.39** |
| CR_047810 | AOWIR Apply available via B2B | | **p.19** |
| CR_047936 | Adaptation of NOP PORTAL for NES MAP - phase-out of Flash | | **p.20** |
| FB1067 | iDAP / Future Helpdesk | | **p.18** |
| CR_047338 | Auto-refresh (poll) only the visible tab in CHMI | | **p.22** |
| CR_048506 | ATFM regulations by Airport terminal | | **p.17** |

## 2.2 NM24.0.1

| Programme | Functional Block | | NM24.0.1 |
|---|---|---|---|
| **n-CONECT** | | **§3.7** | |
| FB1112 | Alignment of Information Regions Worldwide | | **p.43** |

## 2.3 Functional Block description

Each Functional Block is described in a table with the following fields. All descriptions are focused from an external NM point of view.

| **FB…: Number and name of the Functional Block** | |
|---|---|
| Users impacted | The categories of NM Users which are impacted by the new features of the Functional Block:<br>U1. Flow Manager (FMP)<br>U2. Airspace Manager (AMC)<br>U3. Airspace User (Civil)<br>U4. Airspace User (Military)<br>U5. ENV data provider<br>U6. Management (eg crisis management, performance management)<br>U7. Post-ops analyst<br>U8. AO or CFSP<br>U9. CAA, EASA<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport<br>U11. ARO<br>U12. Internal NM<br>U14. Air Navigation Service Provider (ANSP)<br>U0. Other |
| Application impacted | The NM application(s) or service(s) that will be impacted by the Functional Block:<br>A1. CHMI<br>A2. CIFLO, CIAO<br>A3. CIAM<br>A4. CACD<br>A5. Flow management systems (Predict, ETFMS)<br>A6. FPL (IFPS)<br>A7. Datawarehouse (NMIR)<br>A8. CCAMS<br>A9. CSST<br>A10. NOP Portal<br>A11. NM B2B<br>A12. ASM Tools<br>A13. NMVP<br>A14. n-CONECT<br>A15. n-CONECT: AIRSPACE@NES<br>A16. n-CONECT: RAD@NES<br>A17. n-CONECT: CAL@NES<br>A0. Other |
| Objective | Operational objectives of the Functional Block. |
| Description | Description of the main features delivered to external NM users. |

| | |
|---|---|
| | Some FBs (mostly the ones belonging to “Operations Improvements” Programme) may content the CR (Change Request) number of the new features (like CR_xxxxxx). Please refer to this CR number when requesting information to NMD. |
| Impact for external users | Technical or operational impact the Functional Block may have on the external users.<br>I0. No impact.<br>I1. Impact on procedures.<br>I2. Impact on Human-Machine interface.<br>I3. Impact on users’ systems.<br>I4. Other impact. |
| Impact description | Description of the impact for the external users. |
| Service reference | Hyperlink toward the NM activity(ies), service(s) and product(s) that will be impacted by this Functional Block. The global catalogue is available at the following address: https://www.eurocontrol.int/what-we-offer |
| Impact on Services Specifications | Will the FB or CR have an in impact on the NM Services Specifications?<br>S0. Assessment to be performed or on-going.<br>S1. The FB will not have any impact on the NM Services Specifications.<br>S2. The FB will have an impact on the NM Services Specifications.<br>Nota: Services Specifications documents will be made available at a later stage. |
| Operational deployment plan | The way the Functional Block will be deployed:<br>D1. FB will be deployed in Operation along with the release migration.<br>FBs deployed as D1 normally do not include new or changed ATFCM procedures.<br>D2. FB will be subject to a Pilot Phase (Operational Trial) followed by a Go/NoGo decision for ops deployment after Release Migration.<br>New ATFCM procedures or changed ATFCM procedures are normally only issued as a result of D2 deployment. These are issued via Ops Instructions after the consultation process agreed with ODSG.<br>D3. FB will be subject to R&D ops validation (e.g. SESAR).<br>D4. The analysis part of the FB will be done in the Release and the development will be candidate for the next Release. |
| Users’ testing | Depending on the Operational deployment plan:<br>• If D1:<br>  • O1: The FB is planned to be part of the NM Release OPT.<br>  • O2: The FB will not be part of the NM Release OPT.<br>• If D2 or D3: provide additional information on the activities that will take place (pilot phase, ops validation phase, etc.) |
| Documentation publication | The documentations that will be updated following the deployment of the Functional Block. |

## 2.4 Change to NM Services Specifications

Any change to the NM Services Specifications will be provided in this paragraph.

- The Service Specifications documents will be made available at a later stage.

# 3 Network strategic projects

You will find below a short description of each Programme that the Network Manager developments are serving.

## 3.1 Airport-Network integration

The programme aims at facilitating the better integration of airports and its operations with the ATM network. This includes the following areas:

- Connection of A-CDM and Advanced Tower airports to the NM systems.
- Provision of pre-tactical and tactical information to the main NM stakeholders (Airport Operators, Airspace Users and ANSPs) through the NOP portal and future web services.
- Provision of web service based tools for post-operational performance assessment to airports.
- Contribution to events management processes and information provision as to enhance the operational picture through the before-mentioned means.
- Development of new services related to deliverables becoming mature from SESAR research activities (AOP/NOP integration, APOC, Target Times for airports, etc.)

## 3.2 Airspace management and advanced FUA

ASM and Advanced FUA are major components of the Network Strategy Plan (NSP) 2015/2019. The project contributes directly to the NSP Strategic Objective 3 (SO3) “Implement a seamless and flexible airspace enabling Free Routes”, together with the “Free Route Airspace” network strategic project.

The Project will aim at:

- Introducing performance driven operations based on the management of Airspace Configurations in fixed route network and FRA environments.
- Providing processes that support the use of more dynamic and flexible elements.
- Describing a seamless, CDM based process with an advanced real time management of Airspace Configurations as well as a continuous sharing of information among all ATM partners enabled by advanced technology.

The main Lines of Improvement of the Project are:

- Airspace Configuration Definition and Operational Deployment.
- A Collaborative Decision Making Process (ASM/ATFCM/ATC integration).
- The Rolling Process.
- ASM solutions to improve network performance.
- ASM operations in FRA environments.
- ASM system support and data management.
- ASM post ops and performance planning.

## 3.3 CTM (Cooperative Traffic Management)

The CTM Strategic Project aims to optimise traffic delivery through a transparent cooperative approach involving all operational stakeholders in the ATM network: ATC-, Airport-, AU (Airspace Users)- and NM- operations. The CTM Strategic Project addresses the interface between local and network operations and aims to improve tactical coordination processes, enabling the application of flight and flow-specific targeted ATFCM measures, including Target Time measures.

CTM development areas focus on:

- AU’s collaborative processes, improving network situational awareness to AU in order to include preferred targeted measure options into network coordination processes.
- Targeted Measures, specific to only certain flights and flows, minimizing the need for inefficient global ATFM measures.

- Dynamic Network Coordination, supported by continuous information sharing of local and network information, and by digital workflow processes with automated system support where feasible.
- Network Best Measures, continuously simulating impact assessments for single or combined proposed measures optimising local and network performance.

## 3.4 EAIMS (European ATM Information Management Service)

The European ATM Information Management Service (EAIMS) aims at ensuring access to a consolidated, consistent and operationally validated data in a seamless and transparent way as from a single access point to support ARO/AIS/ASM/ATFCM/ATC, flight operations and airport operations.

Through EAIMS, the end user will be provided access to all the required, consolidated, consistent and operationally validated data in a seamless and standardised way from a single access point, which will enable ASM/ATFCM/ATC, flight operations and airport operations.

## 3.5 FPFDE (Flight Plan and Flight Data Evolution)

This FPFDE project encompasses the flight planning developments associated with the introduction of FF-ICE, VFR, OAT and Flight Object. Each of these areas of development have their own specifics with regard to a deployment within NM and the European area of operation.

It's the role of the FPFDE project to coordinate their implementation with the relevant stakeholders. FF-ICE/1 enhances the flight plan data exchanges facilitating a CDM process between AOs/CFSPs, the Network Manager and ANSPs in the pre-departure phase of the flight, with the aim of improving consistency and the accuracy of 4D flight trajectories maintained by the different stakeholders.

In addition to trajectory related information it facilitates an enrichment of the flight plan content, such as operator preferences or advanced CNS capabilities. It also enables introduction of automated exchanges through the use of modern communication methods and technologies, such as B2B and SWIM.

FF-ICE/1 is the very first step on the path towards enabling trajectory based operations.

## 3.6 FRA (Free Route Airspace)

Free route airspace is a specified airspace within which users may freely plan a route between a defined entry point and a defined exit point, with the possibility to route via intermediate (published or unpublished) waypoints, without reference to the ATS route network, subject to airspace availability. Within this airspace, flights remain subject to air traffic control.

The project supports the implementation of the FRA concept, as described in the European Route Network Improvement Plan Part 1 across the NM area. It also forms an integral part of Network Operations Plan (NOP) for the forthcoming five years and is expected to make a major contribution to the Network Performance Plan (NPP). It manages the required system changes in NM and undertakes airspace design, simulation and validation activities required for FRA implementation as well monitoring and reporting on implementation progress.

## 3.7 n-CONECT

The n-CONECT (network-COmmoN Enhanced Collaborative ATM) Programme corresponds to the "NM Ops Service Platform" Strategic Project identified in the NSP (Network Strategy Plan), providing a global vision for the NM service interfaces.

The initial focus of n-CONECT is a planned convergence to single, redesigned HMI for all users, fit for purpose and flexible enough to meet the needs of the different user roles (both internal to NMOC and external).

Through a sequence of projects, the programme will develop services and tools to:

- Ensure access to the Network view to all Stakeholders involved in evolution of NM functions and future ATM;
- Make Network information & decision flows available to support operational CDM between different Stakeholders, across the Network and across the ATFCM phases; and
- Take advantage of new technologies.

n-CONECT will deliver in the following 3 areas:

- B2C interface
- B2B services
- Service management developments in support of both the B2B and B2C services

## 3.8 Operations improvements

### 3.8.1 Domain improvements

Every Release delivers improvements to the NM Operational Domains:

- ATFCM Domain.
- Flight Planning Domain.
- Airspace Data Domain.

### 3.8.2 Transponder Code Function (CCAMS)

In accordance with the Network Manager mandate for the Transponder Code Function (TCF), CCAMS is operated on behalf of states as one of the possible technological solutions supporting the unambiguous and continuous identification of aircraft.

The final goal is to have the use of the downlinked aircraft identification (e.g. through Mode S) operational in the whole area with CCAMS as a back-up technology. Therefore CCAMS is implemented currently in 18 states and the number of users is expected to increase in the coming years.

## 3.9 Performance programme

The ATFM, Network Manager and Performance IRs stress the need for Monitoring and Reporting (M&R) of performance. The aim of this Programme is to provide the data and reporting (including datawarehouse and NMIR) that address the M&R needs.

The Programme includes a wide variety of activities such as: the adaptation of algorithms or databases, creation of new data sets, modification of interfaces graphical identity, and new reports following users' requests. The changes allow the NM to fulfil its commitment on M&R, support other stakeholders with their M&R responsibilities and prepare NM for next SES reference period.

# 4 Release NM24.0

## 4.1 Important notifications related to NM24.0 migration

### 4.1.1 NM24.0 migration is postponed to 23/06/2020

**Important notification:** Following the need to ensure business continuity with respect to the COVID-19, NM plans to postpone NM24.0 migration to the 23/06/2020 (it will last one week, like for any Release).

To be noted:

- NM24.0 CHMI is available for download (§4.2.4)
- New migration plan is available (§4.2.4).
- NM24.0 OPT is extended to the 22/06/2020.

### 4.1.2 Additions to NM24.0 scope - 07/04/2020

The delay in NM24.0 migration has created an opportunity for NM to add functionalities into NM24.0.

A Webinar (Webex presentation) presenting the addition of scope took place on the 19/05/2020.

Slides and recording are available at: https://www.eurocontrol.int/event/eurocontrols-nm240-release-updated-scope-webinar

The addition of scope is described in the current NM Release Notes §4.3.1.

### 4.1.3 I2_118817: Problem when updating the EOBT with a second FPL

| **I2_118817: Problem when updating the EOBT with a second FPL** | |
|---|---|
| Users impacted | U3. Airspace User (Civil)<br>U4. Airspace User (Military)<br>U8. AO or CFSP<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport<br>U11. ARO<br>U12. Internal NM<br>U14. Air Navigation Service Provider (ANSP) |
| Application impacted | A6. FPL (IFPS) |
| Objective | Do not allow a second FPL to be filed to IFPS with a different EOBT to the flight in NM. |
| Description | The update of the EOBT with a second FPL is not allowed in IFPS. If it is attempted by sending a FPL to IFPS, an ACK message is returned with a "COMMENT: Existing FPL has been updated". This is completely misleading because the existing FPL has not been updated.<br>After this fix is delivered, when a FPL associates to another FPL changing the EOBT, the FPL will be invalidated with the new EFPM401 error saying<br>"NOT ALLOWED TO USE A FPL TO UPDATE THE EOBT. DLA OR CHG IS REQUIRED" |
| Impact for external users | I1. Impact on procedures.<br>I3. Impact on users' systems. |
| Impact description | If a flight plan originator attempts to update of the EOBT with a second FPL, the second FPL will be rejected by IFPS. |
| Service reference | Flight plan filing and management |
| Impact on Services Specifications | S1. I2_118817 will NOT have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. I2_118817 will be deployed in Operation along with the release migration. |
| Users' testing | I2_118817 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | IFPS Users Manual |

### 4.1.4 CR_047923: Change the FPP parameter MIN_APL_ACH_DELAY

| **CR_047923: Change the FPP parameter MIN_APL_ACH_DELAY** | |
|---|---|
| Users impacted | U10. Non-CDM Airport<br>U11. ARO<br>U13. CDM-Airport<br>U14. Air Navigation Service Provider (ANSP)<br>U15. Advanced ATC TWR Airport |

| | |
|---|---|
| Application impacted | A6. FPL (IFPS) |
| Objective | Reduce the number of ACH messages sent from IFPS to ATS Units |
| Description | IFPS currently sends an ACH message when the time of the estimate changes by more than 10 minutes (with no other change to the flight). This causes too many ACH messages to be sent to ATS Units.<br>During ODSG/47, it was agreed to change the IFPS system parameter for sending ACH messages from 10 minutes to 40 minutes. As of NM24.0 software release deployment, the parameter in OPS will be 40 minutes. |
| Impact for external users | ATS Units will receive less ACH messages. |
| Impact description | Due to the parameter change from 10 minutes to 40 minutes, ATS Units will receive less ACH messages. |
| Service reference | Flight plan filing and management |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | CR_047923 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | None |

### 4.1.5 Introduction of IAPs into CACD

| | |
|---|---|
| Users impacted | U0. Other: Any NM B2B user |
| Application impacted | A11. NM B2B |
| Objective | Increase the precision of flight trajectory calculations by introducing IAP (Instrument Approach Procedure) in CACD. |
| Description | In NM23.0 arrival procedures (STAR) connect en-route routes to the Aerodromes, where the last segment(s) of the STAR is used to represent IAP.<br>With NM23.5 (FB1016 - CR_041962), internal NM model for terminal procedures have been aligned to AIXM. Namely, NM supports an additional terminal procedure type - Instrument Approach Procedure (IAP).<br>IAP starts at the Initial Approach Fix (IAF) and ends at the RWY. Old terminal procedure model are still supported for backwards compatibility reasons.<br>As from NM23.5, IAP will start to be gradually introduced in CACD, as published by the States.<br>Given the necessity to provide backwards compatibility with the old procedures model, the way SID/STARs are represented in CACD and provided to the users of NM Airspace B2B will not change.<br>This process might continue over several releases.<br>Having IAP in NM systems, will increase precision of the flight trajectory calculations and landing time estimation.<br>Consequently, this change will impact NM B2B users and may impact external systems using NM B2B data. |
| Impact for external users | I2. Impact on Human-Machine interface.<br>I3. Impact on users' systems. |
| Impact description | NM B2B users downloading Airspace Data will have to take into account the change into terminal procedures model. |

### 4.1.6 NM24.0 - Browsers compatibility

Browsers recommended in NM24.0:

- FireFox,
- Chrome.

For these recommended browser brands, NM undertakes to investigate and attempt to resolve problems that can be reproduced on the latest stable version of that brand (anything else is on a “best efforts” basis).

Please note that Internet Explorer will no more be supported as from NM24.0.

### 4.1.7 NM24.0 - Operating Systems compatibility

The recommended operating system is Windows 10. Issues reported on CHMI using Windows 7 will be fixed on a best effort basis.

### 4.1.8 NM24.0 - NM B2B: Unavailability of version NM22.0

It is reminded to NM B2B users that a NM B2B version remains available during two years after its deployment (“NOP/B2B Reference Manuals - Essentials” documentation, available on the NM B2B OneSky Team website).

As a consequence, NM22.0 will no more be available (OPS and PREOPS) after NM24.0 migration.

## 4.2 NM24.0 migration

| Deployment Plan | 2020 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | J | F | M | A | M | J | J | A | S | O | N | D |
| **Release NM24.0** | | | | | | | | | | | | |
| Presentation of NM24.0 to externals | | 11 | | | | | | | | | | |
| OPT | | | 3 | | | 23 | | | | | | |
| Presentation of additions to NM24.0 scope to externals | | | | | 19 | | | | | | | |
| Start of migration | | | | | | 23 | | | | | | |

### 4.2.1 NM24.0 Network Operations Handbook

Network Operations Handbook will be made available one month before the NM Release migration at:

- The NM Network Operations library: https://www.eurocontrol.int/library?f%5B0%5D=activity%3A774
- The Public and Restricted NOP Portal ("Network Operations Handbook" portlet): https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html

### 4.2.2 Presentation of NM24.0 to externals

A video conference presenting the NM24.0 Release took place on the 11th of February 2020.

Slides and recording may be retrieved at: https://www.eurocontrol.int/event/eurocontrols-nm240-release-webinar

Presentation of the addition to NM24.0 scope - cf. §4.1.2

### 4.2.3 NM24.0 testing - OPT session

NM24.0 OPT will take place from the 03rd of March 2020 to the 23th of June 2020.

The NM24.0 OPT (Operational Testing session) enables users to assess the potential impact of NM24.0 against their systems or procedures before NM24.0 migration.

Users are able to:

- Download and test the new NM24.0 CHMI,
- Test the new NM24.0 NOP Portal,
- Test some new FBs (operational scenario provided).

No registration is required.

Please send any questions related to the OPT to nm.opt@eurocontrol.int

### 4.2.4 NM24.0 migration plan

The migration of NM systems from NM23.5 to NM24.0 with start on the 23/06/2020 and last 7 days.

| **Software / Service** (Times are UTC) | **Unavailable from** | **To** | **Remark** | **Business impact during migration** |
|---|---|---|---|---|
| CHMI software | CHMI software (v16.0.4) and documentation availability:<br>- For non NM-managed PC:<br>http://www.nm.eurocontrol.int/chmi_appsoft/NM_24.0/chmi/chmiaoinst16.0.4.pdf<br>- For NM-managed PC: Software will be pushed on the PCs until the 19/06/2020 but not activated (see below). | | | |
| ATFCM CHMI activation except CIAM | **23/06/2020 21:00** | **24/06/2020 00:00** | Expected downtime 1h30 + 1h30 provision in case of rollback | No access to NM services via CHMI |
| CIAM AMC activation | **30/06/2020 16:30** | **30/06/2020 20:00** | - | No access to NM services for CHMI AMC positions (using CIAM) |
| NOP Portal (CPA) unavailability | **23/06/2020 21:00** | **24/06/2020 00:00** | Expected downtime 1h30 + 1h30 provision in case of rollback | No access to NOP Portal (Public and Protected) |
| IFPUV unavailability | **29/06/2020 22:00** | **30/06/2020 00:00** | Expected downtime 1H00 + 1H00 provision in case of rollback | No Flight Plan validation service via all channels including CHMI, NOP Portal and B2B Web Services |
| SAFA / ACC3 Services (FAAS system) unavailability | **29/06/2020 22:00** | **30/06/2020 00:00** | Expected downtime 1H00 + 1H00 provision in case of rollback | No SAFA service during this time period |
| CSST service unavailability | **24/06/2020 07:00** | **24/06/2020 09:00** | - | No CSST service during this time period |

| **System** (Times are UTC) | **Unavailable from** | **To** | **Remark** | **Business impact** |
|---|---|---|---|---|
| **ATFCM services** | | | | |
| ETFMS, PREDICT, CUA | **23/06/2020 21:00** | **24/06/2020 00:00** | Expected downtime 1h30 + 1h30 provision in case of rollback | No Flow Management Services available via all channels including CHMI, NOP Portal and B2B Web Services |
| DWH (Datawarehouse) | **24/06/2020 00:00** | **24/06/2020 06:00** | - | No Query/Replay in CHMI, some NMIR reports will be unavailable. |
| **Flight Plan services** | | | | |
| IFPS | **29/06/2020 22:00** | **30/06/2020 00:00** | Expected downtime 1H00 + 1H00 provision in case of rollback | No Flight Plan filing services via all channels including CHMI, NOP Portal and B2B Web Services |
| **Airspace and Capacity Data Services** | | | | |
| ENV/CACD | **30/06/2020 16:30** | **30/06/2020 20:00** | - | No access to CIAM |
| | No EUUP nor on-line updates will be done in CACD during CACD migration | | | |

**NM B2B services** (Times are UTC)

**Important note:** As the NM B2B services use the NM Back-End systems, NM B2B services will be disrupted during the migration of these systems. In particular, Flight Services will not be available during IFPUV migration (c.f. above).

| | |
|---|---|
| NM24.0 documentation, wsdl and xsd files | NM24.0 **draft** documentation (including wsdl and xsd files) is available on the NM B2B OneSky Team website https://ost.eurocontrol.int/sites/B2BWS.<br>Final version will be available on the 23/06/2020. |

| **Platform** | | **Before NM24.0 PREOPS migration - 18/05/2020 06:00** | **After NM24.0 PREOPS migration - 19/05/2020 14:00** | **Migration to NM24.0 OPS From 23/06/2020 21:00 To 24/06/2020 00:00** Expected downtime 1h30 + 1h30 provision in case of rollback | **After the 24/06/2020 00:00** |
|---|---|---|---|---|---|
| Pre-ops | NM22.0 | Available | **Not available** | Not available | Not available |
| | NM22.5 and NM23.x | Available | Available | Not available | Available |
| | NM24.0 | Not available | Available | Not available | Available |
| Ops | NM22.0 | Available | Available | Not available | **Not available** |
| | NM22.5 and NM23.x | Available | Available | Not available | Available |
| | NM24.0 | Not available | Not available | Not available | Available |

“Expected downtime x hours + y hours provision in case of rollback” means that the system or service will be unavailable minimum x hours and maximum up to (x + y) hours if a rollback to the previous version is required.

## 4.3 Release NM24.0 content

### 4.3.1 Additions to NM24.0 scope - 07/04/2020

| **CR_048506: ATFM regulations by Airport terminal** | |
|---|---|
| Users impacted | U1. Flow Manager (FMP)<br>U3. Airspace User (Civil) - incl. AO<br>U8. CFSP<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport<br>U12. Internal NM<br>U0. Other: Any user that fills Flight Plans via AFTN or NM B2B |
| Application impacted | A5. Flow management systems (Predict, ETFMS)<br>A6. FPL (IFPS)<br>A11. NM B2B |
| Objective | The CR_048506 is targeting to provide the ability for NMOC to apply ATFM regulations by airport terminal.<br>It will provide the possibility to apply ATFM regulations using traffic volumes based on flights departing or arriving from/to different airport terminals.<br>During the post-COVID transition phase, such possibility could be quite helpful to sort out airport issues related to COVID-19 constraints, or other situations (e.g. when a terminal is not available). |
| Description | A new type of flow will be created. It will be used to build specific airport traffic volumes (dep, arr, global), based on the “terminal” information retrieved from the FPL field 18, filed by AUs (Airspace Users), or from A-CDM (DPI and API) messages.<br><br>The information related to the airport terminals will be provided through:<br>• the Field 18 (Other information) of the Flight Plan: this field must contain the keywords:<br>`+TERMINALDEP terminalname`<br>`+TERMINALARR terminalname`<br>• the A-CDM DPI or API (if applicable) messages:<br>`-TERMINALDEP terminalname`<br>`-TERMINALARR terminalname`<br><br>Examples of exact convention are presented below:<br>EGCC has T1, T2 and T3:<br>For departures:<br>`+TERMINALDEP(space)T1`<br>`+TERMINALDEP(space)T2`<br>`+TERMINALDEP(space)T3`<br>For arrivals:<br>`+TERMINALARR(space)T1`<br>`+TERMINALARR(space)T2`<br>`+TERMINALARR(space)T3`<br><br>EGKK has Terminal North and South:<br>For departures: |

| | |
|---|---|
| | `+TERMINALDEP(space)N`<br>`+TERMINALDEP(space)S`<br>For arrivals:<br>`+TERMINALARR(space)N`<br>`+TERMINALARR(space)S`<br>Please note that:<br>• The terminal information received from CDM messages have precedence over the terminal information received from Flight Plans messages.<br>• When a flight is diverted, the arrival terminal in the CTFM will be cleared. |
| Impact for external users | I1. Impact on procedures.<br>I3. Impact on users' systems.<br>I4. Other impact: training |
| Impact description | Airspace Users may have to update their training, procedures and flight planning systems if they want to include information about the airport terminals used.<br>FMPs and airports may have to update their training, procedures and consider the request of new traffic volumes and its required flows if they want to be able to monitor and create measures on airport terminals.<br>The change will be subject to the application of an operational procedure that describes the actions to be taken by Airspace Users, Flow Management Units and airports for the application of the aforementioned change. The procedure includes actions on flight planning and flow management components. |
| Service reference | Flight plan filing and management<br>Network Manager Business-to-business (B2B) web services<br>Operations planning |
| Impact on Services Specifications | S1. The FB will NOT have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. CR will be deployed in Operation along with the release migration. |
| Users' testing | O1: CR_048506 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>ATFCM Operations Manual<br>IFPS Users Manual<br>AD Operations Manual |

| **FB1067: iDAP / Future Helpdesk** | |
|---|---|
| Users impacted | U01. Flow Manager (FMP)<br>U07. Post-ops analyst<br>U08. AO or CFSP<br>U10. Non-CDM Airport<br>U12. Internal NM<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport |
| Application impacted | A05. Flow management systems (Predict, ETFMS)<br>A10. NOP Portal |

| | A11. NM B2B |
|---|---|
| Objective | Following the successful implementation of the eHelpDesk service with previous NM Releases, NMOC is continuing to improve the eHelpDesk service. Main objective is to digitalize the incoming requests to the NMOC what will lead to better service and more time for NMOC to focus on network critical issues.<br>With last changes, the number of phone calls to the NMOC is significantly decreased, and the outcome is more availability of the phone line for critical requests.<br>With the NM24.0 the eHelpDesk service will be fully available via NM B2B. All B2B and B2C requests will arrive into the same queue and will be treated equally. Having centralized reception of all requests in the ETFMS will optimize the workflows within the NMOC resulting with faster response times. |
| Description | **eHelpDesk requests states:**<br>This change will introduce the current B2B requests states to the NOP. B2B is using MCDM (Measure Collaborative Decision Making) Request States that are more complete and provide more information about the request status.<br>**eHelpDesk via B2B:**<br>All eHelpDesk functionalities will be available via both NM B2B and B2C as of NM24.0. |
| Impact for external users | I1. Impact on procedures.<br>I2. Impact on Human-Machine interface. |
| Impact description | • New B2B services available (Full eHelpDesk service available via the NM B2B)<br>• MCDM Request states will be implemented on the NOP:<br>○ Draft: The initiator is drafting the proposal. Request is not yet visible by the NMOC.<br>○ Proposed: The initiator proposes the measure/flight request for its assessment and approval by the NMOC. Request is now visible in the NMOC queue.<br>○ Coordinated: Measure is being reviewed by NMOC staff (equivalent to the LOCKED state today). Initiator can no longer modify/cancel the request.<br>○ For Implementation: Proposal has been accepted, but requires action.<br>○ Implemented: The proposal has been reviewed and accepted. It is already applied in the system.<br>○ Abandoned: Proposal is revoked by the originator.<br>○ Interrupted: The proposal is rejected (automatically or manually by the NMOC) |
| Service reference | Network Operations Portal |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1. FB1067 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>ATFCM Operations Manual<br>NOP Portal Users Guide |

### CR_047810: AOWIR Apply available via B2B

| | |
|---|---|
| Users impacted | U3. Airspace User (Civil) - incl. AO<br>U8. CFSP |

| | |
|---|---|
| | U15. NM B2B users |
| Application impacted | A6. FPL (IFPS)<br>A11. NM B2B |
| Objective | This change will allow the AO/CFSP using the flight planning on NM B2B services to have the full AOWIR package (including Apply/Book) under the same service, without having to access the NOP Portal at all. |
| Description | The Apply AOWIR can be done directly through the NM B2B web services under the applyRerouting Write Service.<br>This NM B2B web service will provide the same results as CHMI or NOP Portal. |
| Impact for external users | I3. Impact on users' systems. |
| Impact description | The applyRerouting Write Service will be available for the AOWIR B2B users.<br>Like for any NM B2B Write service usage, this service will be subject to an operational validation prior of operational usage by the user. |
| Service reference | Network Manager Business-to-business (B2B) web services |
| Impact on Services Specifications | S1. The FB will NOT have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: CR_047810 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | NM B2B manuals |

| **CR_047936: Adaptation of NOP Portal for NES MAP - phase-out of Flash** | |
|---|---|
| Users impacted | U1. Flow Manager (FMP)<br>U2. Airspace Manager (AMC)<br>U3. Airspace User (Civil) - incl. AO<br>U4. Airspace User (Military)<br>U5. ENV data provider<br>U6. Management (eg crisis management, performance management)<br>U7. Post-ops analyst<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport<br>U11. ARO |
| Application impacted | A10. NOP Portal (Protected only) |
| Objective | The NM23.5 Interactive map is based on Flash technology. As the large browser providers will no longer support Flash from end of year 2020, this change intends to maintain the main NOP Portal Interactive map features through a map replacement coded differently. |
| Description | The current map will be replaced by the interactive NES map developed in the context of NES applications. |

| | |
|---|---|
| | The access to the new map will be maintain through different views of the NOP Portal (in all phases Strategic, Pre-Tactical, Tactical, Post-Operations):<br>• Initial Network Plan,<br>• Current Network Situation,<br>• Flight List,<br>• Flight Management,<br>• and IFPUV proposal views and simulation workspace. |
| Impact for external users | I2. Impact on Human-Machine interface. |
| Impact description | The external users of the protected NOP Portal Interactive map will see a map with a different look & feel and same functionalities as the current map.<br>The features will be described in the HELP area of the NOP Portal and will be available through the Release OPT for users' familiarisation. |
| Service reference | The product affected by this change is the Network Operations Portal<br>Services performed through this product may relate to:<br>• Network operations monitoring and reporting<br>• Flight plan filing and management<br>• Collaboration Human Machine Interface<br>• Strategic planning<br>• Operations planning |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: CR_047936 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | NOP Portal Users Guide |

### NCO-14974: Improve presentation of updates in both exported Excel files and RAD application

| | |
|---|---|
| Users impacted | U3. Airspace User (Civil) - incl. AO<br>U12. Internal NM<br>U0. Other: NM RAD Team |
| Application impacted | A16. n-CONECT: RAD@NES |
| Objective | The objective of the change is to improve the readability of the changes in directives of RAD Excel output files and thus to change the User Interface in the application. |
| Description | NCO-14974 will improve presentation of updates in Excel file and in the RAD Application views.<br>**NM23.5 presentation:**<br>`NOT AVAILABLE FOR TRAFFIC`<br>`except:`<br>`1. via TADUV Z21 RIVSA`<br>2. via **~~RBENDO~~BEX** Q230 TADUV<br>`3. ARR EDDP` |

| | |
|---|---|
| | NOT AVAILABLE FOR TRAFFIC<br>except via ~~**MAH**~~**ERSI** Y100 ATMAX<br><br>**Presentation after NM24.0 migration:**<br>Not available for traffic<br>Except<br>1. via TADUV Z21 RIVSA<br>2. via ~~**RENDO**~~ **BEBEX** Q230 TADUV<br>3. ARR EDDP<br>Not available for traffic<br>except via ~~**MAH**~~ **MERSI** Y100 ATMAX |
| Impact for external users | I2. Impact on Human-Machine interface. |
| Impact description | The RAD Excel output file and the User Interface is changed accordingly |
| Service reference | Airspace data |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: NCO-14974 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | n-CONECT manuals |

### CR_047338: Auto-refresh (poll) only the visible tab in CHMI

| | |
|---|---|
| Users impacted | U1. Flow Manager (FMP)<br>U2. Airspace Manager (AMC)<br>U3. Airspace User (Civil) - incl. AO<br>U4. Airspace User (Military)<br>U7. Post-ops analyst<br>U8. CFSP<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport<br>U14. Air Navigation Service Provider (ANSP)<br>U0. Other: Any CHMI / CIFLO / CIAO / CITO / CIAM user |
| Application impacted | A1. CHMI<br>A2. CIFLO, CIAO, CITO<br>A3. CIAM |
| Objective | The objective of the CR is to decrease the number of polling (automatic refresh) done by the CHMI application to NM systems in order to decrease the workload on NM systems. |

| | |
|---|---|
| Description | Several tabs (workspaces) in the CHMI can be opened with auto-refresh (polling) set. Some users have a large number of tabs (e.g. 15) created, each tab having several windows opened (e.g. 10 Traffic Volumes counts). Polling the non-visible tabs is not useful for the user and could be in a large majority of cases avoided.<br>As from NM24.0, by default, the non-visible tabs of the CHMI / CIFLO / CIAO / CITO and CIAM applications will not be automatically refreshed in the background.<br>The tab will be automatically refreshed when the user will select it and make it visible.<br>A new button "global polling" (and corresponding menu item) will be added to activate/de-activate the polling of all windows in the current tab. |
| Impact for external users | I2. Impact on Human-Machine interface. |
| Impact description | The CR should have no tangible impact on a large majority of users as the tab will be refreshed automatically when selected.<br>Users who nevertheless need windows in all tabs to be polled (i.e. NM23.5 behavior) can force this by not checking the user preference “ATFCM → General → Date and times → Only poll active tab” |
| Service reference | Collaboration Human Machine Interface |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users’ testing | O1: CR_047338 is part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | CHMI ATFCM Reference Guide |

### 4.3.2 Airport-Network Integration

| **FB1027: AOP/NOP Integration - Phase IV** | |
|---|---|
| Users impacted | U01. Flow Manager (FMP)<br>U08. AO or CFSP<br>U13. CDM-Airport |
| Application impacted | A05. Flow management systems (Predict, ETFMS) |
| Objective | Improvements to the Departure Planning Information (DPI) messages are identified based on experience acquired with A-CDM processes. As a result, the processing is continuously refined in coordination with the stakeholders. In the transition towards AOP-NOP data exchange, a change concerning the acceptance of the C-DPI message was proposed. |
| Description | **CR_045109: Process C-DPI before EOBT - 3h**<br>A Cancel-DPI provided before the A-CDM horizon timeframe (EOBT – 3h) will be accepted and processed. The C-DPI will be accepted and processed even if it is the first DPI message provided by the A-CDM airport. No change will be made concerning the way the C-DPI is processed. On reception of the C-DPI, the flight is suspended and it is no longer reflected in the traffic demand.<br>The airport may have advance information, from the aircraft operators, that certain flights will not operate. This CR is providing a means to airports to pass this information to the Network Manager from as early as EOBT - 48h or, if the flight plan is filed later, as soon as the flight plan is filed. This will enable NM to update the traffic demand picture before the aircraft operator cancels the flight plan through a CNL message. |
| Impact for external users | I3. Impact on users' systems. |
| Impact description | **CR_045109: Process C-DPI before EOBT - 3h**<br>Providing the C-DPI message earlier than EOBT - 3h is a requirement that would be enforced only for those airports wishing to advance their DPI messaging by setting up the AOP-NOP exchange connection with the network. Please note that the use of NM B2B Web Services is the recommended channel for the AOP-NOP data exchange.<br>In this case, airports should include the reason "FLIGHT_CANCEL_IN_AODB" in the C-DPI message provided via B2B.<br>Existing A-CDM airports will also have the possibility to provide early information on flights that would not operate. However, this requirement will not be mandatory unless the A-CDM airport is engaged in an ongoing AOP-NOP project with the NM.<br>Existing A-CDM airports providing DPI messages via NM B2B Web Services will not be impacted by the change. |
| Service reference | Reception and distribution of real-time airport, air traffic control and surveillance data |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O2: FB1027 will not be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | DPI Implementation Guide |

## FB1066: Tower Update A-DPI evolution

| | |
|---|---|
| Users impacted | U01. Flow Manager (FMP)<br>U07. Post-ops analyst<br>U12. Internal NM<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport |
| Application impacted | A05. Flow management systems (Predict, ETFMS) |
| Objective | FB1066 delivers improvements to the Tower Update A-DPI message processing that enable its roll out to any A-CDM or Advanced ATC TWR airport interested to provide this message to NM, and therefore transitioning from the trial mode to stable operational use.<br>Furthermore, it extends its possible use to enabling the TWR to request de-suspension for a flight that was suspended by Flight Activation Monitoring (FAM). |
| Description | **CR_047510: Over-delivery check for TWRUPDATE A-DPI**<br>When TWR sends a TWRUPDATE A-DPI to request a CTOT extension for the flight, NM system checks several conditions before deciding to grant a 10 minutes extension or not. The purpose of this CR is to complement the existing conditions with an over-delivery check, by only granting the 10 minutes CTOT extension when there is a free slot within the next 20 minutes from the previous CTOT value. When no free slot is found within the next 20 minutes, the next available CTOT will be issued.<br>Consequently, the number of times when the 10 minutes CTOT extension creates an over-delivery will be reduced. In practice, it is expected that an extension is granted in fewer cases than today, and in return, the TWR would receive the next available CTOT. When the latter occurs, the reason why the CTOT extension could not be granted will not be communicated to the TWR.<br>Another change introduced by this CR is that the next available CTOT will be sent to TWR instead of a rejection message in the following cases:<br>• A CTOT has previously been granted to the flight, either automatically or manually; the error message “CTOT ALREADY EXTENDED” will be suppressed.<br>• The limit of 3 granted CTOT extensions in the past rolling hour has been reached; the error message “HOURLY LIMIT FOR AUTOMATIC CTOT EXTENSIONS EXCEEDED” will be suppressed.<br>In all cases when the next available CTOT was sent in response to TWRUPDATE A-DPI, the flight will receive the REA status. Moreover, TWR would retain the possibility to request a CTOT improvement to NMOC.<br>**CR_047513: De-suspension rule via TWRUPDATE A-DPI**<br>TWR will have the possibility to send a TWRUPDATE A-DPI to request de-suspension of a flight that was suspended by FAM. Note that a classic A-DPI is rejected in this case.<br>The CDM status "Actual Off-Block" will be kept when the flight is suspended by the airport (via C-DPI) or by FAM. When the flight is in CDM status “Actual Off-Block”, only the TTOT value from the A-DPI is reset on reception of a C-DPI.<br>A TWRUPDATE A-DPI message will be accepted only when the CDM status is "Actual Off-Block". If not, the message is rejected with “NOT REPORTED AS OFF BLOCK”. |
| Impact for external users | I1. Impact on procedures.<br>I2. Impact on Human-Machine interface.<br>I3. Impact on users’ systems. |
| Impact description | Users who have updated their system to display the error messages on their HMI and / or have defined procedures based on these error messages may need to update their system / procedures due to some of those error messages no longer being output. |

| | |
|---|---|
| | Those five airports that are currently providing the TWRUPDATE A-DPI as part of a trial may notice a drop in the number of granted CTOT extensions. This impact will apply by default to new airports that will only start using the functionality after NM24.0. Post-implementation statistics will be performed to quantify the ratio of CTOT extensions vs. the number of times the next available CTOT is sent in response. These will be shared with the DPI Working Group.<br>TWR should update their procedures if they wish to provide the TWRUPDATE A-DPI message to request de-suspension of a flight suspended by FAM.<br>Airports wishing to provide the TWRUPDATE A-DPI message will need to contact the NM A-CDM team in order to plan an operational test intended to check whether the interaction between their system and the NM system behaves as expected. Following positive outcome of these tests, both parties should agree on a date to activate the TWRUPDATE A-DPI provision on a permanent basis. |
| Service reference | Reception and distribution of real-time airport, air traffic control and surveillance data<br>Airport Collaborative Decision Making |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O2: FB1066 will not be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Operations Manual<br>DPI Implementation Guide |

### 4.3.3 Airspace Management and Advanced FUA

| **FB1064: ASM - Advanced FUA process improvement** | |
|---|---|
| Users impacted | U02. Airspace Manager (AMC)<br>U08. AO or CFSP |
| Application impacted | A01. CHMI<br>A03. CIAM<br>A04. CACD<br>A11. NM B2B |
| Objective | Following the request from several Member States for more flexibility and new capabilities to better apply the AFUA process, the objective of this FB, as part of the ASM-AFUA programme, is to increase system flexibility for further optimisation of airspace usage. |
| Description | **CR_046917: NPZ processed via AUP/UUP**<br>This CR will allow States or AMCs to process NPZ via AUP/UUP. No Planning Zones (NPZs) as a new airspace subtype were implemented (into CACD) with NM23.5. CR_046917 will enable NPZ management via AUP/UUP mechanism.<br>In other words, after the implementation of this change request, NM system will allow Airspace Management Cells (AMCs) to process and notify daily activation of selected NPZs via AUP/UUP. |
| Impact for external users | I1. Impact on procedures.<br>I2. Impact on Human-Machine interface.<br>I3. Impact on users' systems. |

| | |
|---|---|
| Impact description | **CR_046917: NPZ processed via AUP/UUP**<br>In CIAM, AMCs will have a new airspace subtype to provide NPZ information to NM via AUP/UUP.<br>The NPZ IDs will be displayed in the NOP Portal in RSA placeholder with associated restrictions.<br>Users will have to adapt their ASM tools as well as local procedures to process the NPZ IDs with associated restrictions (at least one active by default).<br>For NM B2B users, eAMI content will change as it is going to contain NPZ information. |
| Service reference | Airspace data<br>Airspace management<br>Collaboration Human Machine Interface<br>Network Operations Portal<br>Network Manager Business-to-business (B2B) web services |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1064 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | FUA - AMC/CADF Operations Manual<br>CHMI ASM Function Reference Guide<br>NM B2B manuals<br>NOP Portal Users Guide |

### 4.3.4 CTM (Cooperative Traffic Management)

| **FB987: STAM further developments** | |
|---|---|
| Users impacted | U0. Other: Specific users of the feature |
| Application impacted | A02. CIAO<br>A05. Flow management systems (Predict, ETFMS)<br>A10. NOP Portal<br>A11. NM B2B<br>A14. n-CONECT |
| Objective | The purpose of this Functional Block is to ease the STAM process. |
| Description | For any rerouting proposal sent, NM will provide the measure ID via the NOP Portal flight list details and NM B2B. AUs will be able to retrieve the rerouting constraints and the reason for the type of rerouting proposal in the comment field of the RRP message via AFTN (for instance and in case of STAM measures, through the statement, "Purpose is STAM").<br>Note that in case of STAM measures, this feature will be initially deployed within the context of STAM RRP process with the NCAP tool (evolution of DSNA's CAP tool), only targeting participant aircraft operators. |
| Impact for external users | I0. No impact |
| Impact description | FB987 will impact only AOs participating to the initial operations of the STAM RRP process (with the NCAP tool). Other users will not be impacted.<br>It will thus not be presented to the NM24.0 Presentation to externals (cf §4.2.2) |

| | |
|---|---|
| Service reference | Network operations monitoring and reporting<br>Network Operations Portal<br>Network Manager Business-to-business (B2B) web services |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB987 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>NM B2B manuals<br>NOP Portal Users Guide<br>Re-Routing Opportunities - Information for Airspace Users (CHMI Version)<br>Re-Routing Opportunities - Information for Airspace Users (NOP Version) |

**FB1070: Target Time improvements**

| | |
|---|---|
| Users impacted | U01. Flow Manager (FMP)<br>U03. Airspace User (Civil)<br>U05. ENV data provider<br>U07. Post-ops analyst<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U14. Air Navigation Service Provider (ANSP)<br>U15. Advanced ATC TWR Airport<br>U0. Other: NM EFD users |
| Application impacted | A05. Flow management systems (Predict, ETFMS)<br>A07. Datawarehouse (NMIR)<br>A10. NOP Portal<br>A11. NM B2B |
| Objective | The objective of the FB is to provide to the user a way to inform NM when a flight's STAR is of type DCT. |
| Description | **CR_047021: Implement STAR DCT in General Arrival Planning Information of the NM B2B service requests.**<br>NM will improve the Arrival Planning Information via B2B: it will be possible for users to inform NM that the terminal procedure of arrival is a DCT from the route to the ADES, via a specified point.<br>This specified point can be:<br>• an intermediate point of the current STAR,<br>• or an intermediate point of the route,<br>• or even an ad-hoc point, not part of the STAR definition or part of the route.<br>The `arrivalProcedure` (optional attribute) is being moved into the `arrivalPlanningInformationRequest` which is common to all three arrival planning information request types. |

```
abstract class ArrivalPlanningInformationRequest {
     flightStatusInbound
     arrivalProcedure
}
```

| | |
|---|---|
| | NM is removing `arrivalProcedure` attribute from `GeneralAPIRequest`. |

```
class GeneralAPIRequest extends ArrivalPlanningInformationRequest
{
     registrationMark
     aircraftType
     aircraftIATAId
     arrivalTaxiTime
     ~~arrivalProcedure~~
     arrivalRunway
     arrivalApronStand
}
```

| | |
|---|---|
| Impact for external users | I3. Impact on users' systems. |
| Impact description | Under special arrangements, those users participating in arrival planning information exchange with NM may now include STAR DCT in their general Arrival Planning Information exchanged with NM.<br>Special arrangements include trials or preparation activities leading to the future operational deployment of arrival planning information exchange with NM.<br>STAR DCT into CACD datasets will be provided by ENV data providers.<br>By removing the `arrivalProcedure` from the `generalAPIRequest` means that NM contravenes the normal NM Web service principle of NM24.0 backward compatibility with NM23.5, NM23.0 and NM22.5.<br>The impact should be low because the `generalAPIRequest` is not currently used after the PJ24 and PJ25 trials. NM is in direct contact with the future users of this service and has written to them directly to inform them that they may wish to impact assess this change and to act accordingly.<br>The ETFMS Flight Data (EFD) messages could contain new Event Types: "PDI", "GAI", "TAI" and "OAI". The meaning of these new events is:<br>• PDI (Predicted Departure Planning Information),<br>• GAI (General Arrival Planning Information), triggered by an NM B2B service request that updates NM with flight arrival information, such as STAR,<br>• TAI (Target Take-Off Arrival Planning Information) service request that have resulted in a flight's CTOT calculation,<br>• OAI (Target Time-Over Arrival Planning Information) service request that updates the planned times up to arrival time for the flight.<br>As well, a new CDMSTATUS could be present in the EFD messages after the processing of a P-DPI message by ETFMS. |
| Service reference | Reception and distribution of real-time airport, air traffic control and surveillance data<br>Network Manager Business-to-business (B2B) web services<br>Airport Capacity and Performance<br>Airport Collaborative Decision Making<br>Airport information management |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1070 is planned to be part of the NM Release OPT (Operational Testing Session) |

| | |
|---|---|
| Documentation publication | ATFCM Operations Manual (ATFCM Operations Manual will be updated to reflect future progress of AOP-NOP and extended AMAN projects)<br>API Implementation Roadmap<br>API Implementation Guide<br>Flight Progress Messages document |

**FB1072: Predictability improvements**

| | |
|---|---|
| Users impacted | U1. Flow Manager (FMP)<br>U3. Airspace User (Civil)<br>U8. AO or CFSP<br>U14. Air Navigation Service Provider (ANSP) |
| Application impacted | A01. CHMI<br>A05. Flow management systems (Predict, ETFMS)<br>A10. NOP Portal<br>A11. NM B2B |
| Objective | The objective of this FB is to facilitate improvements of existing Yo-Yo tool (identification of Yo-Yos in filed flight plans). |
| Description | NM is committed to support the reduction of Yo-Yo flight plans.<br>A Yo-Yo flight can be defined as following a vertical profile that is planned to (after reaching the initial top of the climb and before reaching the final top of descent during the cruising phase) descent certain amount of FLs and then climbs a certain amount of FLs.<br>As from NM23.0, NM system is used for live Yo-Yo detection based on predefined detection parameters. Flight plans and change messages submitted are checked on Yo-Yo presence.<br>When detected, the Yo-Yo information will be used by AOs and FMP in the CDM process in order to agree on actions:<br>• to refile flight plan without Yo-Yo profile<br>• or to adhere to the flight plan with Yo-Yo profile<br>FB1072 will enable more precise filtering by NM systems of operationally critical Yo-Yo profile as it will include the length parameter (of the distance between Yo-Yo Start and Yo-Yo End) in identification criteria.<br>Yo-Yo information will be distributed through B2B (via Query/Reply and Publish/Subscribe). |
| Impact for external users | I1. Impact on procedures.<br>I2. Impact on Human-Machine interface |
| Impact description | This FB will impact only users deciding to make use of the Yo-Yo information made available via NM B2B. |
| Service reference | Collaboration Human Machine Interface<br>Network Operations Portal |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1072 is planned to be part of the NM Release OPT (Operational Testing Session) |

| | |
|---|---|
| Documentation publication | CHMI ATFCM Reference Guide<br>NM B2B manuals<br>NOP Portal Users Guide |

### 4.3.5 EAIMS (European ATM Information Management Service)

| **FB1086: CACD validation of RAD** | |
|---|---|
| Users impacted | U12. Internal NM<br>U0. Other: National RAD Coordinator |
| Application impacted | A16. n-CONECT: RAD@NES |
| Objective | FB1086 will validate the RAD restrictions against CACD data modifications (Present and future) and report affected Restrictions. |
| Description | As from NM24.0, the RAD data will be validated against present and the next future AIRAC. Any RAD restriction becoming invalid because of CACD data changes will be reported.<br>RAD restrictions will be reported when incoherencies are detected and when potential implicit incoherencies are identified.<br>When subsequently the RAD restrictions are modified, an incremental file will be generated. |
| Impact for external users | I1. Impact on procedures. |
| Impact description | RAD restrictions becoming incoherent or potentially invalid will be presented to the NRC who will have to define appropriate procedures to handle them. |
| Service reference | Airspace data |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1086 is planned to be part of the NM Release OPT (Operational Testing Session involving also the NRCs) |
| Documentation publication | Provision of CACD Data<br>AD Operations Manual |

### 4.3.6 FPFDE (Flight Plan and Flight Data Evolution)

| **FB1074: FF-ICE filing Function - file eFPL** | |
|---|---|
| Users impacted | U03. Airspace User (Civil)<br>U08. AO or CFSP<br>U12. Internal NM |
| Application impacted | A06. FPL (IFPS)<br>A11. NM B2B |

| | |
|---|---|
| Objective | The FB1074 implements features that couldn't be addressed with the initial FF-ICE Filing Service deployment in NM23.0. It is another incremental step towards full alignment with the ICAO FF-ICE Filing service specification.<br>The FF-ICE will eventually replace the current ICAO procedures and processes for the filing of a flight plan, and provide the means for the exchange of flight plan data, including trajectory and aircraft performance. |
| Description | FB1074 will address the following topics:<br>• Support of Planned Delay (equivalent of STAY / DLE) and OAT information in the 'structured' route elements;<br>• Flight plan originator information (equivalent of ORGN in Item 18 of the FPL);<br>• Implement departure and destination airport slot identification;<br>• Support of IATA flight number. |
| Impact for external users | I1. Impact on procedures.<br>I3. Impact on users' systems. |
| Impact description | External users submitting eFPLs (FF-ICE flight plans in FIXM4.1 data format) through the NM B2B Flight services will have to adapt their systems to be able to provide any of the elements listed above under Description. |
| Service reference | Flight plan filing and management<br>Network Manager Business-to-business (B2B) web services |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB1074 will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1074 will be part of the NM Release OPT (Operational Testing Session) on PREOPS |
| Documentation publication | IFPS Users Manual<br>NM B2B manuals<br>FF-ICE/R1 Extended Release Notes - Release 24.0 |

### 4.3.7 Free Route Airspace (FRA)

| **FB1084: FRA improvements** | |
|---|---|
| Users impacted | U1. Flow Manager (FMP)<br>U7. Post-ops analyst<br>U12. Internal NM |
| Application impacted | A4. CACD<br>A5. Flow management systems (Predict, ETFMS)<br>A7. Datawarehouse (NMIR) |
| Objective | Update Traffic Volumes dynamically. |
| Description | Traffic patterns can evolve during the operational day, in particular due to operational measures that have already been put in place to regulate them.<br>Traffic volumes may have been incorrectly defined in the AIRAC and require updates. With NM23.5, Traffic volumes can only be renamed and recreated but not altered by live updates to adapt to new traffic flows.<br>FB1084 will allow traffic volumes to be dynamically changed in ENV; the ETFMS regulations based on these traffic volumes will be re-evaluated. |

| | |
|---|---|
| Impact for external users | I1. Impact on procedures. |
| Impact description | When live updates to traffic volumes are enabled, ETFMS will automatically re-evaluate any regulations using the updated traffic volumes. Flights will be de-regulated and reregulated without intervention of the NMOC Flow Controllers and slots re-issued.<br>Changes to the traffic volume input by CACD in the ENV system can potentially change the slot allocation of many flights in ETFMS without the interaction of the NMOC Flow Controllers so close cooperation between the two teams and possibly with the FMP involved will be essential.<br>Attention must be paid to the training of the Operational staff to ensure that the update procedure and the impact on the operational traffic is understood. |
| Service reference | Network operations monitoring and reporting<br>Airspace data<br>Centralised secondary surveillance radar code assignment and management system<br>Network Operations Portal<br>Network Manager Business-to-business (B2B) web services<br>Operations planning |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1084 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Operations Manual<br>Provision of CACD Data<br>AD Operations Manual |

### 4.3.8 n-CONECT

| **FB1095: RAD Full Completion** | |
|---|---|
| Users impacted | U5. ENV data provider<br>U12. Internal NM<br>U0. Other: National RAD Coordinator |
| Application impacted | A16. n-CONECT: RAD@NES |
| Objective | FB1095 will provide an application which allows the National RAD coordinators (NRC) to define and maintain RAD restrictions and to interface with neighbouring NRCs and the NM RAD team.<br>It will also provide allow the NM RAD team to consolidate the proposed RAD restrictions amendments and publish the RAD document. |
| Description | FB1095 will replace the legacy RAD Excel spreadsheet by a tailored application that allow the NRC to store, maintain and edit its RAD restrictions. This will facilitate the coordination with neighboring states.<br>It will automate the interfacing with the NM RAD team and allow the RAD team to consolidate the proposed RAD restrictions and publish the RAD document.<br>At a later stage, RAD@NES will also allow to feed the CACD system in a computer assisted way with Restrictions. |

| | |
|---|---|
| Impact for external users | I1. Impact on procedures.<br>I2. Impact on Human-Machine interface. |
| Impact description | NRC will have to update their procedures and use the new tool to provide RAD information to NM.<br>Output (RAD Excel file) structure remains unchanged. |
| Service reference | Airspace data<br>Collaboration Human Machine Interface |
| Impact on Services Specifications | S1. The FB will NOT have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1095 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>Provision of CACD Data<br>AD Operations Manual<br>n-CONECT manuals |

### 4.3.9 Operations Improvements

| **FB1042: ATFM messaging for AOs via B2B** | |
|---|---|
| Users impacted | U08. AO or CFSP<br>U14. Air Navigation Service Provider (ANSP)<br>U0. Other: NM B2B users |
| Application impacted | A05. Flow management systems (Predict, ETFMS)<br>A11. NM B2B |
| Objective | Objective of FB1042 is to extend the reception and distribution of the ATFM information into the NM B2B services. |
| Description | **CR_046808: Slot Related Messages on B2B**<br>The Annex J of the ATFCM Operations Manual describes the slot related messages generated by NM/AO and exchanged via AFTN/SITA.<br>The information presented into the below messages will be included into the B2B services.<br>Generated by NM:<br>• SAM (Slot Allocation Message)<br>• SRM (Slot Revision Message)<br>• SLC (Slot Cancellation message)<br>• FLS (Flight Suspension Message)<br>• DES (De-Suspension Message)<br>• SIP (Slot Improvement Proposal Message)<br>• RRP (Rerouting Proposal Message)<br>• RRN (Rerouteing Notification Message)<br>• ERR (Error Message)<br>Generated by AOs:<br>• REA (Ready Message) and FCM (Flight Confirmation Message)<br>• SMM (Slot Missed Message) |

| | |
|---|---|
| | • SPA (Slot Improvement Proposal Acceptance Message)<br>• SRJ (Slot Proposal Rejection Message)<br>• SWM (SIP Wanted Message (RFI is set to 'no'))<br>• RFI (Ready For Improvement (after SWM)) |
| Impact for external users | I3. Impact on users' systems. |
| Impact description | The input of the SMM, SPA, SRJ, SWM, RFI, REA, RJT type messages will be addressed using the NM B2B Request/Reply service, under a new subtype called ATFMRequest (to be confirmed).<br>The output messages in NM B2B is the P/S services.<br>In particular, the PSFD (Publish/Subscribe Flight Data message) is used to inform the NM B2B users about changes to the flight data, and it already contains most of the flight fields used in the ATFM output messages. The information present in the SAM, SRM, SLC, FLS, DES, SIP, RRP, RRN, ERR will be found under the PSFD.<br>The ETFMS Flight Data (EFD) messages could contain other Event Types like: "RRM", "OAR", "RJT", "RFR", "RSI", "SIP", "SSP", "UCD". This new events mean: RRM (Rerouting Proposal Creation), triggered by a Rerouting Proposal (RRP) or Rerouting Notification (RRN) message, OAR (ATFM Rerouting), RJT (Rerouteing reJecTion (RJT) message; an RJT is a negative response to a Rerouteing Proposal (RRP) message), RFR (Re-route after reroute cancellation), RSI (CASA Revoke slot proposal), SIP (CASA booking (SIP)), SSP (CASA STAM Proposal), UCD (Update MCDM Data).<br>Example:<br>-TITLE EFD<br>-TIMESTAMP 191218020000<br>-EVENT RRM<br>-EVENTCLASS MSG<br>-FLTSTATE FS<br>…. |
| Service reference | Network Manager Business-to-business (B2B) web services |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1042 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>ATFCM Operations Manual<br>NM B2B manuals |

### I2_118832: Retrieving original ADES for diverted flight via B2B

| | |
|---|---|
| Users impacted | U08. AO or CFSP<br>U14. Air Navigation Service Provider (ANSP)<br>U0. Other: Any B2B user |
| Application impacted | A11. NM B2B |
| Objective | Retrieve via NM B2B the original ADES for a diverted flight |

| | |
|---|---|
| Description | **I2_118832: Retrieving original ADES for diverted flight via B2B**<br>With the I2_118832, a fix is delivered to be able to indicate the original filed aerodrome of destination in case the flights was diverted.<br>In the NM B2B Flight service, the flight.flightId.keys. aerodromeOfDestination will contain always the original filed ADES.<br>In case of diversion, the below fields will complete the flight information.<br>• The flight.flightId.keys.aerodromeOfDestination is always:<br>○ The original filed ADES.<br>• The flight.divertedAerodromeOfDestination is always:<br>○ the diverted ADES if the flight was diverted<br>○ not present if the flight was not diverted |
| Impact for external users | I3. Impact on users' systems. |
| Impact description | Content of existing fields will be modified with NM24.0. |
| Service reference | Network Manager Business-to-business (B2B) web services |
| Impact on Services Specifications | S1. The I2 will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. I2 will be deployed in Operation along with the release migration. |
| Users' testing | O1: I2_118832 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | NM B2B manuals |

| **FB1059: ATFCM Domain improvements** | |
|---|---|
| Users impacted | U1. Flow Manager (FMP)<br>U3. Airspace User (Civil)<br>U8. AO or CFSP<br>U9. CAA, EASA<br>U10. Non-CDM Airport<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport<br>U12. Internal NM<br>U14. Air Navigation Service Provider (ANSP) |
| Application impacted | A1. CHMI<br>A2. CIFLO, CIAO, CITO<br>A5. Flow management systems (Predict, ETFMS)<br>A10. NOP Portal<br>A11. NM B2B |
| Objective | Objective of FB1059 is to indicate the diversion of a flight if a different aerodrome of destination (from the original filed aerodrome of destination) is received in the CPR (Correlated Position Report) messages.<br>FAM mechanism parameter will also be reduced. |

| | |
|---|---|
| Description | **CR_046613: Flag diverted flights from the CPRs information**<br>Today, the diversion is indicated and shared only after a Div_ACH or a Div_ARR is received (messages received by IFPS and forwarded to ETFMS).<br>Not all ATM systems are able to send Div_ACH. Therefore, in most of the cases the diversion is already indicated directly through the FSA/CPRs received directly on ETFMS.<br>With NM24.0, ETFMS is able to identify the different ADES (compared with the original filed ADES) from the CPR messages and set the flight as diverted. The diversion will be visible on CHMI and NOP applications and provided via NM B2B webservices.<br>**Reminder:** in CHMI and NOP applications, the Flight List could indicate the diversion in the “D” column (by the sign ‘>’). As well, in case of diversion, the Flight Data will contain the diverted aerodrome (under ‘ADES’ field) and the original filed ADES (under the ‘Filed ADES’ field).<br>**CR_045506: FAM reduction**<br>The Flight Activation Monitoring (FAM) mechanism parameter for suspension of:<br>• Flights departing from FAM-enabled areas,<br>• Or flights departing from non FAM-enabled areas and less than three hours of Estimated Elapsed Time (EET) with a destination/crossing a FAM-enabled areas,<br>will be reduced by 5 minutes; from 20 minutes to 17 minutes (15 minutes as alignment with ICAO regulation, and 2 minutes as buffer for message propagation time).<br>The stepped reduction of the parameter was decided at ODSG/41 to support flight planning and predictability in the European ATM Network.<br>The change is aligned with ICAO: any changes to the EOBT of more than 15 minutes for any IFR flight within the IFPZ shall be communicated to the IFPS. (ICAO Doc 7030, 2.3.2.1).<br>This implementation is the third step of the parameter reduction. Further information can be found at: https://www.eurocontrol.int/function/flight-activation-monitoring |
| Impact for external users | **CR_046613: Flag diverted flights from the CPRs information**<br>I0. No impact.<br>**CR_045506: FAM reduction**<br>I1. Impact on procedures.<br>I3. Impact on users’ systems. |
| Impact description | **CR_046613: Flag diverted flights from the CPRs information**<br>The diversion will be triggered by the reception of the Div_ACH, Div_ARR and, with NM24.0, by the information received in the CPRs when the ADES will differ from the original filed ADES.<br>**CR_045506: FAM reduction**<br>CR_045506 may have possible impact on flights departing from FAM-enabled areas or of flights departing from non-FAM-enabled areas and less than three hours of Estimated Elapsed Time (EET) with a destination/crossing a FAM-enabled areas that are not reported as airborne. Such flights will be shifted in their CTFM by 5-minute steps three times and will be eventually suspended after another 2 minutes if not reported as airborne (FSA, CPR message received by the NM). FMPs, airports and AOs should be advised of the change and ensure that adequate operational actions are taken. |
| Service reference | Flight plan filing and management<br>Reception and distribution of real-time airport, air traffic control and surveillance data |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |

| | |
|---|---|
| Users' testing | O1: FB1059 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>ATFCM Operations Manual<br>DPI Implementation Guide<br>IFPS Users Manual<br>Flight Progress Messages Document |

| **FB1085: eHelpDesk improvements** | |
|---|---|
| Users impacted | U01. Flow Manager (FMP)<br>U07. Post-ops analyst<br>U08. AO or CFSP<br>U10. Non-CDM Airport<br>U12. Internal NM<br>U13. CDM-Airport<br>U15. Advanced ATC TWR Airport |
| Application impacted | A05. Flow management systems (Predict, ETFMS) |
| Objective | Following the successful implementation of the eHelpDesk service with NM23.0 and NM23.5, NMOC is continuing to improve the eHelpDesk service. Main objective is to digitalize the incoming requests to the NMOC that will lead to a better service and more time for NMOC to focus on network critical issues.<br>With last summer changes, the number of phone calls to the NMOC has significantly decreased, and the outcome is more availability of the phone line for critical requests.<br>With NM24.0, Airline Operators will have the possibility to flag their flights as critical which will ensure that they will be highlighted to the NMOC staff.<br>Flights in Ready status will be highlighted while in the queue. |
| Description | **CR_047330: Flight Criticality indicator**<br>Airline operators will have the possibility to flag eHelpDesk request as critical. Critical requests will not be subject to automatic processing rules, and will be highlighted to the NMOC staff when processing. Critical requests will be highlighted with the magenta color on the NOP flight list and eHelpDesk queue. Airline operator will have a limited number of these requests per flight and per day, subject to Network constraints, depending on the number of regulated flights in the system.<br>**CR_047008: Highlighting of REA flights.**<br>Flights that are in "Ready" status will be marked in the details area of the eHelpDesk request (only HMI impact, these requests will be processed as any other).<br>**Minimum take-off time provision**<br>eHelpDesk users will be able to provide the earliest take off time that they can achieve and help the operator when finding the most suitable improvement. This can increase the likelihood of getting the improvement and reduce the time of response. |
| Impact for external users | I1. Impact on procedures.<br>I2. Impact on Human-Machine interface. |
| Impact description | Mostly HMI impact (highlighting REA and critical flights), but also new input mechanism for highlighting of the critical flights. They will be further explained during the NMOC release presentation and later versions of NM release notes. |
| Service reference | Network Operations Portal |

| | |
|---|---|
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | O1: FB1085 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | ATFCM Users Manual<br>ATFCM Operations Manual<br>NOP Portal Users Guide |

| **CR_047018: Delete old group rerouting indicators from a flight when applying a similar group rerouting** | |
|---|---|
| Users impacted | U3. Airspace User (Civil)<br>U8. AO or CFSP |
| Application impacted | A1. CHMI<br>A10. NOP Portal |
| Objective | The objective of this CR is to improve the alerting of GRRT users when the tool calculates an alternative route in scheduled runs. |
| Description | Before NM24.0 Release, information stored in the OPP column of the CHMI or NOP Portal flight lists was not reflecting the latest (scheduled) GRRT calculation.<br>Whenever GRRT would identify an alternative route, this information would be ~~stored~~ presented in CHMI or NOP Portal OPP column. However, if in the following run(s) no alternative route was found, OPP column would still keep indication generated in the previous run in which an alternative was highlighted.<br>With this improvement, the user will only see the latest (best) outcome of the GRRT calculations.<br>NOTE: CHMI Archive data will store only the last status of the OPP column. |
| Impact for external users | I0. No impact. |
| Impact description | This CR will improve the user experience by providing more up to date GRRT calculations in the CHMI or NOP Portal. |
| Service reference | Collaboration Human Machine Interface<br>Network Operations Portal |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. CR will be deployed in Operation along with the release migration. |
| Users' testing | O1: CR_047018 is planned to be part of the NM Release OPT (Operational Testing Session) |
| Documentation publication | Network Operations - Flight Efficiency User Manual |

# 5 Release NM24.0.1

## 5.1 Important notifications related to NM24.0.1 migration

### 5.1.1 Browsers compatibility

Browsers recommended in NM24.0.1:

- FireFox,
- Chrome.

For these recommended browser brands, NM undertakes to investigate and attempt to resolve problems that can be reproduced on the latest stable version of that brand (anything else is on a "best efforts" basis).

Please note that Internet Explorer is not supported anymore as from NM24.0, hence neither for NM24.0.1.

### 5.1.2 Operating Systems compatibility

The recommended operating system is Windows 10. Issues reported on CHMI using Windows 7 will be fixed on a best effort basis.

### 5.1.3 NM B2B

NM24.0.1 will not deploy any new B2B version – no change as compared to NM 24.0.

## 5.2 Migration

| Deployment Plan | 2020 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | J | F | M | A | M | J | J | A | S | O | N | D |
| **Release NM24.0.1** | | | | | | | | | | | | |
| Presentation of NM24.0.1 to externals* | | | | | | | | | | | | |
| Start of migration | | | | | | | | | | | 10 | |

*** No presentation of NM24.0.1 is foreseen to externals**

### 5.2.1 Network Operations Handbook

There is no impact of this release on the Network Operations Handbook.

- The NM Network Operations library: https://www.eurocontrol.int/library?f%5B0%5D=activity%3A774
- The Public and Restricted NOP Portal ("Network Operations Handbook" portlet): https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html

### 5.2.2 Presentation to Externals

No presentation of NM24.0.1 to externals is foreseen.

### 5.2.3 OPT session

No OPT session is foreseen for NM24.0.1.

## 5.3 NM24.0.1 migration plan

~~The migration of NM systems from NM24.0 to NM24.0.1 will take place on the 10/11/2020 and should last a few hours. NM shall issue more detailed information in time.~~

**The migration of NM systems from NM24.0 to NM24.0.1 will take place on the 10/11/2020, from 22h00 to 23h30 UTC.**

- **Regarding CHMI:**
  - **No change in CHMI: no new CHMI version to download**
  - **CHMI will be interrupted on 10/11/2020, from 22h00 to 23h30 UTC**
- **NES:**
  - **NES (n-CONECT) will be interrupted on 10/11/2020, from 22h00 to 23h30 UTC**

## 5.4 Release NM24.0.1 content

### 5.4.1 Important Notification: New URL to NES (n-CONECT)

**This notification concerns only NES (n-CONECT) users, namely RAD users.**

**The current URL to NES (n-CONECT) is: https://b2c.nes.nm.eurocontrol.int.**
**For technical reasons, this URL has posed and keeps posing a number of cookie and logon/logoff issues.**
**In order to avoid these technical issues, a new URL to NES (n-CONECT) is provided with NM24.0.1: https://b2c.nm.eurocontrol.int.**
**However, the old URL will remain available after NM24.0.1 migration, with the known technical issues.**

**Consequently, NM recommends to start making use of the new URL to NES (https://b2c.nm.eurocontrol.int) from 11/11/2020 onwards.**

### 5.4.2 n-CONECT

| **FB1112: Alignment of Information Regions Worldwide** | |
|---|---|
| **Users impacted** | U8. AO or CFSP |
| Application impacted | A15. n-CONECT: AIRSPACE@NES |
| Objective | Improve the accuracy of Information Regions worldwide, and align with EAD, with the purposes of fine-tuning the timing element of the NM flight profiles, and of enabling the distribution of departure messages worldwide by NM in a future release. |
| Description | Information Regions (and other airspaces like OTA (Oceanic Transition Areas)) will be downloaded from EAD worldwide, and the CACD data will be updated accordingly (using human-attended but automated tool). |
| Impact for external users | No application change.<br>Only the Information Regions (FIR, UIR, …) and OTA data will become more accurate outside the IFPZ. |
| Impact description | See above |
| Service reference | N/A |
| Impact on Services Specifications | S1. The FB will not have any impact on the NM Services Specifications. |
| Operational deployment plan | D1. FB will be deployed in Operation along with the release migration. |
| Users' testing | N/A |
| Documentation publication | N/A |

# 6 Release NM24.5

No NM24.5 release will take place.

According to the NM B2B policy regarding the NM B2B services lifecycle, the NM22.5 B2B services should have been decommissioned with NM24.5. Exceptionally, in the absence of a NM24.5 release, the NM22.5 B2B services will remain deployed until NM25.0 (April 2021).

In the absence of the NM24.5 release, there is no new application or application change, e.g. no new CHMI, no change in NOP Portal, … in that release.

# 7 Documentation

| **Network Operations Handbook** | |
|---|---|
| Network Operations library | https://www.eurocontrol.int/library?f%5B0%5D=activity%3A774 |
| ATFCM Users Manual | https://www.eurocontrol.int/publication/atfcm-users-manual |
| ATFCM Operations Manual | https://www.eurocontrol.int/publication/atfcm-operations-manual |
| NM B2B documentation | https://ost.eurocontrol.int/sites/B2BWS/default.aspx<br>Registration required - contact NM.servicerequests@eurocontrol.int |
| NM B2B Write access criteria | https://ost.eurocontrol.int/sites/B2BWS/Shared%20Documents/8%20-%20Operational%20Deployment%20Process%20-%20Documentation/WRITEServiceDocumentationSet.pdf |
| CCAMS User Manual | https://www.eurocontrol.int/publication/ccams-user-manual |
| IFPS Users Manual | https://www.eurocontrol.int/publication/ifps-users-manual<br>Flight Plan guide: https://contentzone.eurocontrol.int/fpl/default.aspx |
| Flight Plan Guide and IFPS errors guide | https://contentzone.eurocontrol.int/fpl/default.aspx |
| NMIR Users Guide | https://www.eurocontrol.int/publication/nmir-users-guide |

# 8 ABBREVIATIONS

| | |
|---|---|
| ACC3 | Air Cargo or Mail Carrier operating into the Union from a Third Country Airport |
| A-CDM | Airport-Collaborative Decision Making |
| ACH | ATC flight plan Change |
| ACK | IFPS Acknowledgement Message |
| AD | Airspace Data |
| ADES | Aerodrome of Destination |
| A-DPI | Airport-Departure Planning Information |
| AFP | ATC Flight Plan |
| AFTN | Aeronautical Fixed Telecommunication Network |
| AFUA | Advanced Flexible Use of Airspace |
| AIRAC | Aeronautical Information, Regulation and Control |
| AIS | Aeronautical Information Services |
| AIXM | Aeronautical Information Exchange Model |
| AMAN | Arrival Manager |
| AMC | Airspace Management Cell |
| ANSP | Air Navigation Service Provider |
| AO | Aircraft Operator |
| AOP | Airport Operations Plan |
| AOWIR | Aircraft Operator What-if Reroute |
| API | Arrival Planning Information |
| APL | ATC Flight Plan |
| APOC | Airport Operations Centre |
| ARO | Air Traffic Services Reporting Office |
| ARR | Arrival Message |
| ASM | Airspace Management |
| ATC | Air Traffic Control |
| ATFCM | Air Traffic Flow and Capacity Management |
| ATFM | Air Traffic Flow Management |
| ATM | Air Traffic Management |
| ATS | Air Traffic Services |
| AU | Airspace User |
| AUP | Airspace Use Plan |
| B2B | Business-to-Business |
| B2C | Business-to-Consumer |
| CAA | Civil Aviation Authority |
| CACD | Central Airspace and Capacity Database (new name of ENV) |
| CADF | ECAC Centralized Airspace Data Function |
| CAP | Collaborative Advance Planning (DSNA tool) |
| CASA | Computer Assisted Slot Allocation |

| | |
|---|---|
| CCAMS | Centralised SSR Code Allocation & Management |
| CDM | Collaborative Decision Making |
| C-DPI | Cancel-Departure Planning Information |
| CFSP | Computerised flight plan service provider |
| CHG | Modification Message |
| CHMI | Collaboration Human Machine Interface |
| CIAM | Collaboration Interface for AMCs |
| CIAO | Collaboration Interface for AO |
| CIFLO | Collaboration Interface for Flow management position |
| CITO | Collaboration Interface for Tower |
| CNL | Cancellation Message |
| CNS | Communications, Navigation, Surveillance |
| COVID-19 | Coronavirus Disease 2019 |
| CPA | Collaboration Portal Application |
| CPR | Correlated Position Report |
| CR | Change Request |
| CSST | Call-Sign Similarities Tool |
| CTFM | Current Tactical Flight Model |
| CTM | Cooperative Traffic Management |
| CTOT | Calculated Take-Off Time |
| CUA | Common User Access |
| DCT | Direct Route |
| DES | De-Suspension Message |
| DLA | Delay or Delay Message |
| DLE | Delay or holding on route |
| DPI | Departure Planning Information |
| DSNA | Direction des Services de Navigation Aérienne |
| DWH | Data Warehouse system |
| EAIMS | European ATM Information Management Service |
| EASA | European Union Aviation Safety Agency |
| EDDP | Leipzig Halle Airport |
| EET | Estimated Elapsed Time |
| EFD | ETFMS Flight Data |
| eFPL | FF-ICE flight plan |
| EGCC | ICAO code for Manchester airport |
| EGKK | ICAO code for London Gatwick airport |
| ENV | NM Environment System (former name of CACD) |
| EOBT | Estimated Off Block Time |
| ERR | Error Message |
| ETFMS | Enhanced Tactical Flow Management System |
| EUROCONTROL | European Organization for the Safety of Air Navigation |

| | |
|---|---|
| EUUP | European Update airspace Use Plan |
| FAAS | Flight Assessment and Alert System |
| FAM | Flight Activation Monitoring |
| FB | Functional Block |
| FCM | Flight Confirmation Message |
| FF-ICE | Flight and Flow Information for a Collaborative Environment |
| FL | Flight Level |
| FLS | Flight Suspension Message |
| FMP | Flow Management Position |
| FPFDE | Flight Plan and Flight Data Evolution |
| FPL | Flight Plan message (ICAO format) |
| FPP | Flight Plan Processing |
| FRA | Free Route Airspace |
| FSA | First System Activation message |
| FUA | Flexible Use of Airspace |
| GAI | General Arrival Planning Information |
| GRRT | Group Re-Routing Tool |
| HMI | Human-Machine Interface |
| I2 | Incident Type 2 |
| IAF | Initial Approach Fix |
| IAP | Instrument Approach Procedure |
| IATA | International Air Transport Association |
| ICAO | International Civil Aviation Organization |
| ID | Identifier |
| iDAP | Integrated Digital ATFCM Platform |
| IFPS | Integrated Initial Flight Plan Processing System |
| IFPUV | IFPS Unit for Validation |
| IFPZ | IFPS Zone |
| IFR | Instrument Flight Rules |
| IR | Implementing Rule |
| M&R | Monitoring and Reporting |
| MCDM | Measure Collaboration Decision Making |
| MIN | Minimum |
| MSG | Message |
| NCAP | Network Collaborative Advance Planning (DSNA tool) |
| NCO | n-CONECT |
| n-CONECT | network-COmmoN Enhanced Collaborative ATM |
| NES | n-CONECT Eco System |
| NM | Nautical Mile |
| NM | Network Manager |
| NMD | Network Manager Directorate |

| | |
|---|---|
| NMIR | NM Interactive Reporting |
| NMOC | Network Manager Operations Centre |
| NMVP | Network Manager Validation Platform |
| NOP | Network Operations Plan |
| NOP | Network Operations Portal |
| NPP | Network Performance Plan |
| NPZ | No Planning Zone |
| NRC | National RAD Coordinator |
| NSP | Network Strategy Plan |
| OAI | Target Time-Over Arrival Planning Information |
| OAR | ATFM Rerouting |
| OAT | Operational Air Traffic |
| ODSG | Operations and Development Sub-Group |
| OPP | Opportunity |
| OPS | Operations |
| OPT | Operational testing |
| ORGN | Originator |
| P/S | NM B2B Publish/Subscribe |
| PC | Personal Computer |
| PC | Provisional Council |
| PDI | Predicted Departure Planning Information |
| P-DPI | Predicted DPI |
| PREDICT | Variant of TACT used for Pre-Tactical Work |
| PSFD | Publish Subscribe Flight Data (NM B2B) |
| R&D | Research and Development |
| RAD | Route Availability Document |
| REA | Ready Message |
| RFI | Ready For Improvement Message |
| RFR | Re-route after reroute cancellation |
| RJT | Rerouteing Rejection message |
| RQS | Requested Supplementary Information Message |
| RRM | Rerouting Proposal Creation |
| RRN | Rerouteing Notification Message |
| RRP | Rerouting Proposal Message |
| RSA | Restricted Airspace |
| RSI | CASA Revoke slot proposal |
| RWY | Runway |
| SAFA | Safety Assessment of Foreign Aircraft (Programme) |
| SAM | Slot Allocation Message |
| SES | Single European Sky |
| SESAR | Single European Sky ATM Research |

| | |
|---|---|
| SID | Standard Instrument Departure |
| SIP | Slot Improvement Proposal Message |
| SITA | Société Internationale de Télécommunications Aéronautiques |
| SLC | Slot Cancellation message |
| SMM | Slot Missed Message |
| SO | Strategic Objective |
| SPA | Slot Improvement Proposal Acceptance Message |
| SRJ | Slot Proposal Rejection message |
| SRM | Slot Revision Message |
| SSP | CASA STAM Proposal |
| STAM | Short-Term ATFM Measures |
| STAR | Standard Terminal Arrival Route |
| SWIM | System-Wide Information Management |
| SWM | SIP Wanted Message |
| TAI | Target Take-Off Arrival Planning Information |
| TCF | Transponder Code Function |
| TLP | Traffic Light Protocol |
| TTOT | Target Take Off Time |
| TWR | Aerodrome Control Tower |
| UCD | Update MCDM Data |
| UTC | Coordinated Universal Time |
| UUP | Updated Airspace Use Plan |
| VFR | Visual Flight Rules |

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